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# BLUEBOND™

## UV-6422

### UV/LED CURE ACRYLATED URETHANE

#### TECHNICAL DATASHEET

NOVEMBER 2024

#### PRODUCT DESCRIPTION

BLUEBOND™ UV-6422 is a UV cure, form-in-place (FIP) gasketing sealant formulated for fuel cells, underwater enclosures, and high-temperature sealing applications requiring a low compression set. UV-6422 has good adhesion to plastics, electroplated plastics, and metal surfaces and exhibits superior heat, water, and chemical resistance.

#### Applications

- FIP Gasket
- Fuel Cell
- High Temperature Sealing

#### Features

- Low Viscosity
- Low Compression Set
- Water Resistant
- High Acid/Base Resistance

#### Substrates

- Metals
- Glass
- Plastics

#### Packaging

- Syringes
- Liters
- Pails

#### TYPICAL PROPERTIES OF UNCURED MATERIAL

Property	Value
Chemical Class	Urethane Acrylate
Appearance	Clear/Slightly Cloudy
Odor	Mild Odor
Viscosity, 25°C	7,000-10,000
Density g/cc	1.05

#### TYPICAL PROPERTIES OF CURED MATERIAL

Property	Value
Hardness	A-10
Glass Transition Temperature (Tg), °C	10
Linear Shrinkage, %	1.8
Compression Set, % (70°C, 22°C)	15
Modulus of Elasticity, psi	20
Volume Resistivity, Ω-cm	1.0 x 10 <sup>12</sup>

## UV CURE INFORMATION

Property	Value
Minimum Intensity, mW/cm <sup>2</sup>	250
Optimum Wavelength, nm	365, 405
Optimum Cure Conditions	3-5 seconds (25 mW/cm <sup>2</sup> )

### Directions for Use:

1. This product is light sensitive; exposure to daylight, UV light and artificial lighting should be kept to a minimum during storage and handling.
2. The product should be dispensed from applicators with black feedlines.
3. For best performance bond surfaces should be clean and free from grease.
4. Cure rate is dependent on lamp intensity, distance from light source, depth of cure needed or bond line gap and light transmittance of the substrate through which the radiation must pass
5. Cooling should be provided for temperature sensitive substrates such as thermoplastics.
6. Plastic grades should be checked for risk of stress cracking when exposed to liquid adhesive.
7. Excess uncured adhesive can be wiped away with organic solvent (e.g. Acetone).
8. Bonds should be allowed to cool before subjecting to any service loads

### Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling. Shelf life is 12 months from date of manufacture in unopened container.

### Optimal Storage:

25°C (+/- 10°C). Material removed from containers may be contaminated during use. Do not return product to the original container. Epoxyset cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact Epoxyset [info@epoxyset.com](mailto:info@epoxyset.com) or by phone at +1 (401)-726-4500

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